

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently amended) A directed medication system to minimize the potential of an adverse drug reaction to a prescribed medical therapy, said directed medication system comprising:

a drug metabolism test component comprising a medical sample receiving apparatus having at least a first sample holding pad configured to receive a user's biological sample for determining the presence of one or more predefined drug metabolism markers that are indicative of a potential adverse drug reaction to a prescribed medical therapy; and

a prescription instruction component containing a first instruction that directs a user to obtain said drug metabolism test component and to follow said test component instructions to submit a sample for testing, and a second instruction that directs said user on how to obtain a customized medical therapy containing a prescription for a medication that minimizes the potential for an adverse drug reaction, said customized medical therapy being based on a result of said testing at least coordinating instructions disclosing to a user of said drug metabolism test component the procedure for obtaining a customized medical therapy based on the results of said drug metabolism test component.

2. (Original) The system of Claim 1 wherein said one or more predefined drug metabolism markers is selected from the group consisting of DNA and enzymes.
3. (Original) The system of Claim 1 wherein said drug metabolism test component is a genomics-based test.
4. (Withdrawn – currently amended) The system of Claim 3 wherein said drug metabolism test component comprising:

a hinged folder ~~containing having at least one~~ said first sample holding pad wherein said ~~first absorbent~~ sample holding pad is impregnated with chemicals to lyse cell membranes and immobilize nucleic acids wherein said first sample at least one holding pad has a pad indicia, said first sample holding pad configured for receiving a user's biological sample wherein said biological sample is a patient's buccal cell sample; and a buccal cell sampling swab wherein said swab has indicia linking said swab to said indicia wherein said first instruction further includes; and ~~test component~~ instructions for collecting, applying and submitting said user's patient's buccal cell sample for customizing a medical therapy using genomic information derived from said buccal sample of said patient.

5. (Currently amended) The system of Claim 1 wherein said ~~prescription instruction component includes a first instruction directing said user to obtain said drug metabolism test component and to follow the instructions provided with said drug metabolism test component, and a second instruction~~ further directs directing said user to present said result of said testing to a healthcare provider to obtain said customized medical therapy containing a prescription for a medication that minimizes the potential for an adverse drug reaction based on said results of said drug metabolism test component.
6. (Withdrawn – currently amended) The system of Claim 1 wherein said prescription instruction component includes an instruction component and a prescription component wherein said prescription component includes at least a conditional dosage prescription for a medication that minimizes the potential for an adverse drug reaction for said customized medical therapy based on said result results of said drug metabolism test component.
7. (Withdrawn – currently amended) The system of Claim 6 wherein said conditional dosage prescription further includes a prescription portion instructing a prescription provider to dispense said medication ~~on dispensing said customized medical~~ therapy based on the result results of said drug metabolism test component.

8. (Withdrawn – currently amended) The system of Claim 7 wherein said prescription portion includes a homozygous positive test instruction, a heterozygous mid-positive test instruction and a negative test instruction instructing said prescription provider to dispense said medication based on the result of said drug metabolism test component being a homozygous positive test, a heterozygous mid-positive test or a negative test.
9. (Withdrawn – currently amended) The system of Claim 7 wherein said conditional dosage prescription includes a plurality of separate prescriptions wherein said plurality of separate prescriptions includes a first prescription for a homozygous positive test result from said drug metabolism test component, a second prescription for a heterozygous mid-positive test result from said drug metabolism test component and a third prescription for a negative test result from said drug metabolism test component.
10. (Withdrawn) The system of Claim 6 wherein said prescription component further includes an initial dose prescription.
11. (Withdrawn – currently amended) The system of Claim 10 wherein said conditional dosage prescription includes a prescription portion instructing a prescription provider to dispense said medication ~~on dispensing said customized~~

medical therapy based on the result results of said drug metabolism test component.

12. (Withdrawn – currently amended) The system of Claim 11 wherein said prescription portion includes a homozygous positive test instruction, a heterozygous mid-positive test instruction and a negative test instruction instructing said prescription provider to dispense said medication based on the result of said drug metabolism test component being a homozygous positive test, a heterozygous mid-positive test or a negative test.
13. (Withdrawn – currently amended) The system of Claim 11 wherein said conditional dosage prescription includes a plurality of separate prescriptions wherein said plurality of separate prescriptions includes a first prescription for a homozygous positive test result from said drug metabolism test component, a second prescription for a heterozygous mid-positive test result from said drug metabolism test component and a third prescription for a negative test result from said drug metabolism test component.
14. (Withdrawn – currently amended) The system of Claim 10 wherein said initial dose prescription for an initial dose of said medication medical therapy is selected from the group consisting of mercaptopurine, flourouracil, or azathioprene.

15. (Withdrawn – currently amended) The system of Claim 6 wherein said ~~prescription component further includes~~ conditional dosage prescription is an initial dosage of said ~~medication~~ medical therapy.
16. (Withdrawn – currently amended) The system of Claim 15 wherein said conditional dosage prescription includes a prescription portion instructing a prescription provider to dispense said medication ~~on dispensing said customized medical therapy based on the result results of said drug metabolism test component.~~
17. (Withdrawn – currently amended) The system of Claim 16 wherein said prescription portion includes a homozygous positive test instruction, a heterozygous mid-positive test instruction and a negative test instruction instructing said prescription provider to dispense said medication based on the result of said drug metabolism test component being a homozygous positive test, a heterozygous mid-positive test or a negative test.
18. (Withdrawn – currently amended) The system of Claim 16 wherein said conditional dosage prescription includes a plurality of separate prescriptions wherein said plurality of separate prescriptions includes a first prescription for a homozygous positive test result from said drug metabolism test component, a

second prescription for a heterozygous mid-positive test result from said drug metabolism test component and a third prescription for a negative test result from said drug metabolism test component.

19. (Withdrawn – currently amended) The system of Claim 15 wherein said initial ~~dosage~~ dose of said medication ~~medical therapy~~ is a dose of mercaptopurine, flourouracil, or azathioprene.
20. (Withdrawn) A directed medication system comprising:
- a drug metabolism test means for determining the presence of one or more predefined drug metabolism markers; and
  - a prescription instruction means for obtaining a customized medical therapy based on the results of said drug metabolism test means.
21. (Withdrawn) The system of Claim 20 wherein said drug metabolism test means is selected from the group consisting of DNA and enzymes.
22. (Withdrawn) The system of Claim 20 wherein said drug metabolism test means is a genomics-based test.
23. (Withdrawn) The system of Claim 20 wherein said prescription instruction means

includes a first instruction means directing said user to obtain said drug metabolism test means and to follow the instructions provided with said drug metabolism test means, and a second instruction means directing said user to obtain said customized medical therapy based on said results of said drug metabolism test means.

24. (Withdrawn) The system of Claim 20 wherein said prescription instruction means includes an instruction means and a prescription means wherein said prescription means includes at least a conditional dosage prescription for said customized medical therapy based on said results of said drug metabolism test means.
25. (Withdrawn) The system of Claim 24 wherein said conditional dosage prescription includes a prescription portion instructing a prescription provider on dispensing said customized medical therapy based on the results of said drug metabolism test component.
26. (Withdrawn) The system of Claim 25 wherein said prescription portion includes a homozygous positive test instruction, a heterozygous mid-positive test instruction and a negative test instruction.
27. (Withdrawn) The system of Claim 25 wherein said conditional dosage prescription



includes a plurality of separate prescriptions wherein said plurality of separate prescriptions includes a first prescription for a homozygous positive test result, a second prescription for a heterozygous mid-positive test result and a third prescription for a negative test result.

28. (Withdrawn) The system of Claim 24 wherein said prescription means further includes an initial dose prescription.
29. (Withdrawn) The system of Claim 28 wherein said conditional dosage prescription includes a prescription portion instructing a prescription provider on dispensing said customized medical therapy based on the results of said drug metabolism test component.
30. (Withdrawn) The system of Claim 29 wherein said prescription portion includes a homozygous positive test instruction, a heterozygous mid-positive test instruction and a negative test instruction.
31. (Withdrawn) The system of Claim 28 wherein said conditional dosage prescription includes a plurality of separate prescriptions wherein said plurality of separate prescriptions includes a first prescription for a homozygous positive test result, a second prescription for a heterozygous mid-positive test result and a third

prescription for a negative test result.

32. (Withdrawn) The system of Claim 28 wherein said initial dose prescription is for an initial dose of medical therapy selected from the group consisting of mercaptopurine, fluorouracil, or azathioprene.
33. (Withdrawn) The system of Claim 24 wherein said prescription means further includes an initial dosage of said medical therapy.
34. (Withdrawn) The system of Claim 33 wherein said conditional dosage prescription includes a prescription portion instructing a prescription provider on dispensing said customized medical therapy based on the results of said drug metabolism test component.
35. (Withdrawn) The system of Claim 34 wherein said prescription portion includes a homozygous positive test instruction, a heterozygous mid-positive test instruction and a negative test instruction.
36. (Withdrawn) The system of Claim 34 wherein said conditional dosage prescription includes a plurality of separate prescriptions wherein said plurality of separate prescriptions includes a first prescription for a homozygous positive test result, a

second prescription for a heterozygous mid-positive test result and a third prescription for a negative test result.

37. (Withdrawn) The system of Claim 33 wherein said initial dose of medical therapy is a dose of mercaptopurine, fluorouracil, or azathioprene.
38. (Withdrawn) A method for customizing a medical therapy for a patient, said method comprising:
- obtaining the results of a drug metabolism test for said patient; and
  - prescribing a customized medical therapy based on said results.
39. (Withdrawn) The method of Claim 38 further comprising providing said drug metabolism test to said patient.
40. (Withdrawn) The method of Claim 38 further comprising instructing said patient to obtain a drug metabolism test and to follow the instructions of said drug metabolism test.
41. (Withdrawn) The method of Claim 38 further comprising prescribing an initial dose of said medical therapy.

42. (Withdrawn) The method of Claim 38 further comprising providing an initial dose of said medical therapy.
43. (Withdrawn) A method of a treating medical disorder, said method comprising:  
screening a patient for potential adverse reactions to a medical therapy; and  
instructing said patient on the mechanism to obtain a customized medical therapy based on the results of said screening step.
44. (Withdrawn) The method of Claim 43 wherein said screening step further includes instructing said patient to obtain a drug metabolism test kit and to follow the instructions of said drug metabolism test kit.
45. (Withdrawn) The method of Claim 43 wherein said instructing step further includes providing a prescription for a customized medical therapy based on the results of a drug metabolism test for said patient.
46. (Withdrawn) The method of Claim 45 wherein said instructing step further includes providing a conditional prescription for a customized medical therapy having a prescription portion that includes a homozygous positive test instruction, a heterozygous mid-positive test instruction and a negative test instruction wherein only one of said test instructions are followed based on the results of said drug

metabolism test.

47. (Withdrawn) The method of Claim 45 wherein said instructing step further includes providing a plurality of prescriptions wherein said plurality of prescriptions includes a first conditional prescription for a homozygous positive test result, a second conditional prescription for a heterozygous mid-positive test result and a third conditional prescription for based on the results of said drug metabolism test.
48. (Withdrawn) The method of Claim 45 wherein said prescription providing step further includes providing a prescription for an initial dose of said medical therapy.
49. (Withdrawn) The method of Claim 48 wherein said instructing step further includes providing a conditional prescription for a customized medical therapy having a prescription portion that includes a homozygous positive test instruction, a heterozygous mid-positive test instruction and a negative test instruction wherein only one of said test instructions are followed based on the results of said drug metabolism test.
50. (Withdrawn) The method of Claim 48 wherein said instructing step further includes providing a plurality of prescriptions wherein said plurality of prescriptions includes a first conditional prescription for a homozygous positive test result, a

second conditional prescription for a heterozygous mid-positive test result and a third conditional prescription for a negative test result wherein said plurality of prescriptions are based on the results of said drug metabolism test.

51. (Withdrawn) The method of Claim 45 wherein said prescription providing step further includes providing an initial dose of said medical therapy.
52. (Withdrawn) The method of Claim 51 wherein said instructing step further includes providing a conditional prescription for a customized medical therapy having a prescription portion that includes a homozygous positive test instruction, a heterozygous mid-positive test instruction and a negative test instruction wherein only one of said test instructions are followed based on the results of said drug metabolism test.
53. (Withdrawn) The method of Claim 51 wherein said instructing step further includes providing a plurality of prescriptions wherein said plurality of prescriptions includes a first conditional prescription for a homozygous positive test result, a second conditional prescription for a heterozygous mid-positive test result and a third conditional prescription for a negative test result wherein said plurality of prescriptions are based on the results of said drug metabolism test.